

REMARKS

Claims 14-26 are pending and under consideration. Reconsideration is requested.

Traverse of Rejections

On pages 2-4 of the Office Action, the Examiner rejects independent claims 14 and 25 (and dependent claims 15-18, 21-24, and 26) under 35 U.S.C. §102(b) as being anticipated by Park et al. (U.S.P. 5,912,884 A1) ("Park").

On pages 5-6 of the Office Action, the Examiner rejects dependent claims 19-20 under 35 U.S.C. §103(a) as being unpatentable over Park in view of Budka et al. (U.S.P. 6,577,871).

The rejections are traversed.

Independent claim 14 recites a method for controlling transmission of data in a radio communication system having a hierarchical network architecture including "administering physical resources for a data transmission to user equipment by a first device at a first hierarchy within the hierarchical network architecture, the first device providing a physical radio connection interface to the user equipment; and transmitting load information about a current load situation of the physical resources by the first device to a second device at a second hierarchy higher than the first hierarchy within the hierarchical network architecture for controlling a load distribution." (Emphasis added). Independent claim 25 has a similar recitation.

Applicants submit that all of the features taught by at least each of the independent claims are not taught by the art of record.

By contrast with the recitation of claim 14, for example, Park merely teaches:

In general, the CDMA Mobile System (referred to "CMS" hereinafter simply) is a Mobile Communication System, based on a stored program control system, and a system in which processors are provided hierarchically. A base station controller controls a number of base transceiver subsystems. The base station controller and the base transceiver system can induce an overload due to a great quantity of calls generated therein. In this case, a prior art method controls the overload only for the base station controller when the overload is detected in the base station controller. . . (and) . . . As described above, the base station controller and the base transceiver subsystem are formed to have the hierarchy of different processors.

(See, for example, col. 1, lines 12-22 and col. 2, lines 59-61).

That is, Park merely teaches a hierarchical system structure, wherein a base station controller and base transceiver subsystems comprise processors of different hierarchies.

Further, Park merely teaches:

One base station controller has a cell control processor (hereinafter referred to "CCP" simply) and 32 selector interface module (hereinafter referred to "SIM" simply) and is in charge of the wire and wireless link control signals and the control of the calls. A CIN (CDMA Interconnection Network) of the base station controller provides a communication path through packet data transmission between the BSM and base station controller and the base transceiver subsystem. The SIM is composed of a selector interface processor (hereinafter referred to as "SIP") and a selector vocoding processor (hereinafter referred to as "SVP"), etc. One base station controller accommodates 32 base transceiver subsystems and 32 SIPs at the maximum and each of SIPs can be connected with 4 SVPs at the maximum. The base transceiver subsystems are connected with the base station controllers via a link and route or transceive the control information and the traffic information of the mobile station through interaction.

(See, for example, col. 2, lines 32-51).

That is, Park teaches that a base station controller is defined to be in charge of link control and control of calls whereas base transceiver subsystems interact with mobile stations. Accordingly, Park teaches a system structure that corresponds to a conventional network architecture wherein the base station controller administers physical (radio) resources and base transceiver stations (as an individual part of a base transceiver subsystem) uses these assigned resources for data transmission to mobile stations.

Applicants submit that the conventional hierarchical structure taught by Park does not teach a hierarchical structure, as recited by each of the independent claims.

By contrast, claim 14, for example, recites a first device providing physical radio connection interface to the user equipment, that is, it is the base transceiver station that administers the physical radio resources.

By contrast, Park merely teaches that a base station controller administers the physical radio resources, is aware of critical load situations in one or multiple base transceiver subsystems, and therefore does not need to receive any information regarding the present load from these subsystems.

Furthermore, Park does not teach, for example, that the base station controller transmits load information to system component at a higher hierarchical, e.g. the base station manager. (See, for example, col. 2, lines 25-31).

The Examiner cites the disclosure of Park in Fig. 2 and the corresponding description in col. 3, lines 10-27 as teaching "transmitting load information about a current load situation of the physical resources by the first device to a second device at a second hierarchy higher than the first hierarchy within the hierarchical network architecture for controlling a load distribution," as

recited by claim 14. (See, for example, Office Action at page 3).

But, Applicants submit that by contrast, Park merely teaches:

FIG. 2 shows a configuration of multi-layer cell environment with a hierarchical structure. Referring to FIG. 2, the description of the configuration of multi-layer cell environment with the hierarchical structure is as follows: In the figure, the level of the load imposed on cells is indicated. The cell located in the centermost indicates that it is currently in the condition of overload, multi-cell environments in the right side illustrates an example which retrieves a cell with minimum load around the overloaded cell to expand the cell with minimum load through the forward power control and then handoffs a call in the vicinity of a neighboring cell among calls in the overloaded cell. A multi-cell configuration is composed of 3 layers. A first layer represents a cell in the overload condition. A second layer includes neighboring cells around the overload cell and 6 cells in a standard cell structure.

(See, for example, col. 3, lines 10-27).

That is, Park merely teaches a multi-cell configuration comprising three layers, wherein each layer defines a ring around a central cell, is also defined as a hierarchical structure.

But, Park does not teach the hierarchy of this multi-cell structure corresponds to the system hierarchy. Applicants submit that such teaching would result in the central cell T(0,0) of the first layer being assigned to a first base transceiver subsystem, while all neighboring cells T(1,x) of the second layer are assigned to a second base transceiver subsystem and all cells T(2,x) of the third layer are assigned to a third base transceiver subsystem.

Applicants submit that one of ordinary skill in the art would assume that all cells and all layers disclosed by Park in Fig. 2 are assigned to the same base transceiver subsystem, which would enable the base station controller to manage the load within these multiple base transceiver stations.

Further, Applicants submit that nothing in the teaching of Budka overcomes the deficiencies in the teaching of Park discussed above.

Since all of the features of independent claims 14 and 25 are not taught by the art of record the rejection should be withdrawn.

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Claims 15-24 depend from claim 14, and claim 26 depend from claim 25. These dependent claims include all of the features of the respective claims upon which they depend, plus additional features which are not disclosed or suggested by the cited references.

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Therefore, it is respectfully submitted that claims 15-24 and 26 also patentably distinguish over the cited references.

Conclusion

Since all of the features recited by claims 14-26 are not taught by the art of record, the rejections should be withdrawn.

Conclusion

There being no further outstanding objections or rejections, it is respectfully submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Response, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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